

SECOND PRELIMINARY AMENDMENT AND  
RESPONSE TO RESTRICTION REQUIREMENT  
Application Serial No. 10/815,791  
Attorney Docket No. 02734.0388-03000

### **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions and listings of claims in the application. Please amend claims 89-96, cancel claim 97, and add new claims 98-107.

Claims 1-86 (canceled).

Claim 87 (withdrawn): A process for forming a mica-filled polypropylene or polypropylene polyethylene copolymer or blend extruded sheet comprising the steps of:

- (a) forming an extrudable admixture of polypropylene or polypropylene polyethylene copolymer or blend resin and mica;
- (b) extruding said extrudable admixture of polypropylene or polypropylene polyethylene copolymer or blend resin and mica at elevated temperature;
- (c) passing the resulting extruded admixture of polypropylene, polypropylene polyethylene copolymer, or blend resin and mica through a multiple roll stack, at least one roll of said roll stack having a matte finish;
- (d) passing said extruded admixture of polypropylene, polypropylene polyethylene copolymer, or blend resin and mica at least partially around said roll having a matte finish;
- (e) controlling the speed of said extrusion process, the size, temperature, and configuration of said roll stack such that the surface of said extruded admixture of polypropylene, polypropylene polyethylene copolymer, or blend resin and mica in contact with said matte roll has a matted structure; and

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(f) recovering an extruded sheet comprising a polypropylene or polypropylene polyethylene copolymer or blend and mica moieties, said sheet having a matted surface.

Claim 88 (withdrawn): The extruded sheet prepared according to the process of claim 87.

Claim 89 (withdrawn and currently amended): A microwaveable, food contact compatible, disposable, rigid and strong, mica-filled polyolefin container, wherein the polyolefin resin is selected from the group consisting of polypropylene and polypropylene polyethylene copolymer or blend, and a mixture of these, and wherein the container is formed by a process comprising the steps of:

- (a) forming an extrudable admixture of the polyolefin resin and mica;
- (b) extruding said extrudable admixture of the polyolefin resin and mica at elevated temperature;
- (c) passing the resulting extruded admixture of the polyolefin resin and mica through a multiple roll stack of rolls, at least one roll of said stack having a matte finish;
- (d) passing said extruded admixture of the polyolefin resin and mica at least partially around said roll having a matte finish;
- (e) controlling the speed of said extrusion process, the size, temperature, and configuration of said roll stack such that the surface of said extruded

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admixture of the polyolefin resin and mica not in contact with said matte roll has a coarse-grained structure;

(f) thermoforming said extruded admixture of the polyolefin resin and mica; and

(g) recovering a container having a micronodular surface and a rough surface and exhibiting a melting point of no less than 250°F, said container being dimensionally stable and resistant to grease, sugar, and water at temperatures up to about 220°F and having sufficient toughness to be resistant to cutting by serrated flatware.

Claim 90 (withdrawn and currently amended): The microwaveable, food contact compatible, disposable, rigid and strong, mica-filled polyolefin container according to claim [[96]] 89, wherein the container is a plate.

Claim 91 (withdrawn and currently amended): The microwaveable, food contact compatible, disposable, rigid and strong, mica-filled polyolefin container according to claim [[96]] 89, wherein the container is a cup.

Claim 92 (withdrawn and currently amended): The microwaveable, food contact compatible, disposable, rigid and strong, mica-filled polyolefin container according to claim [[96]] 89, wherein the container is a bowl.

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Claim 93 (withdrawn and currently amended): The microwaveable, food contact compatible, disposable, rigid and strong, mica-filled polyolefin container according to claim [[96]] 89, wherein the container is a tray.

Claim 94 (withdrawn and currently amended): The microwaveable, food contact compatible, disposable, rigid and strong, mica-filled polyolefin container according to claim [[96]] 89, wherein the container is a bucket.

Claim 95 (withdrawn and currently amended): The microwaveable, food contact compatible, disposable, rigid and strong, mica-filled polyolefin container according to claim [[96]] 89, wherein the container is a soufflé dish.

Claim 96 (currently amended): A process for the manufacture of a microwaveable, food contact compatible, disposable, rigid and strong container ~~comprising an extruded sheet consisting essentially of an admixture of polyolefin, mica and pigment thermoformed by application of vacuum into the shape of a container; wherein said polyolefin is chosen from at least one of polypropylene and polypropylene-polyethylene copolymer or blend; said container further exhibiting:~~

- (a) a micronodular surface on at least one side of the container ~~surface~~; and
- (b) a melting point of no less than about 250°F;

said container being dimensionally stable and resistant to grease, sugar, and water at temperatures up to at least about 220°F and of sufficient toughness to be resistant to cutting by serrated polystyrene ~~flatware comprising; flatware, the process comprising~~

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~~(a) heat softening an extruded sheet consisting essentially of an admixture of polyolefin selected from the group consisting of polypropylene, polypropylene-polyethylene copolymer or blend, and mixture of these, mica, and pigment, wherein the heat softening of the extruded sheet is conducted at a temperature of at least about 265°F; and~~

~~(b) vacuum forming the container in a mold controlled to form a micronodular surface on at least one side of the container not in contact with the mold surface.~~  
thermoforming at least one extruded sheet comprising an admixture of platy inorganic material and polyolefin, wherein the thermoforming is conducted at a temperature of at least about 265°F and results in the micronodular surface on at least one side of the container.

Claim 97 (canceled).

Claim 98 (new): The process of claim 96, wherein the platy inorganic material is mica.

Claim 99 (new): The process of claim 96, wherein the polyolefin is selected from at least one of polypropylene, polypropylene-polyethylene copolymer, and polypropylene-polyethylene blend.

Claim 100 (new): The process of claim 96, wherein thermoforming the container comprises at least one of drape, vacuum, pressure, free blowing, matched die, billow

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drape, vacuum snap-back, billow vacuum, plug assist vacuum, plug assist pressure, pressure reverse draw with plug assist vacuum, reverse draw with plug assist, pressure bubble immersion, trapped sheet, slip, diaphragm, twin-sheet cut sheet, twin-sheet rollfed forming, and pillow forming.

Claim 101 (new): The process of claim 96, wherein thermoforming the container comprises vacuum forming the container in a mold controlled to form the micronodular surface on the surface of the container not in contact with the mold surface.

Claim 102 (new): The process of claim 96, wherein the extruded sheet further comprises at least one additive chosen from coupling agents, process aids, lubricants, nucleating agents, antistatic agents, antioxidants, and coloring agents.

Claim 103 (new): The process of claim 102, wherein the at least one additive is present in the admixture.

Claim 104 (new): The process of claim 102, wherein the coupling agent comprises at least one of: silanes; organofunctional silicone compounds; chlorinated hydrocarbons with and without silane; *in situ* polymerization products of monomers; modified polyolefins; maleic anhydride; acrylic modified polypropylene; and maleic anhydride modified polypropylene.

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Claim 105 (new): The process of claim 102, wherein the process aid comprises at least one of waxes and fluorinated polymers.

Claim 106 (new): The process of claim 102, wherein the coloring agent comprises at least one of pigments and dyes.

Claim 107 (new): The process of claim 106, wherein the pigment comprises at least one of carbon black, titanium dioxide, zinc oxide, iron oxides, and mixed metal oxides.